

## **Sending Mollusk Voucher Specimens for ID**

(Updated 8/5/04)

### **What to Collect**

In order to assure that data recorded in Agency databases for mollusks reflects the correct species ID, voucher specimens should be collected and verified. As a rule of thumb, when species are detected during surveys and inventories, collect a representative specimen for every taxon (species or subspecies) that is or could be a Special Status taxon, and representative specimens of other taxa that are of interest. Good data quality requires at least one specimen per survey area, which is defined on pp. 12-13 of the Survey Protocol for Terrestrial Mollusk Species (Ver. 2.0) <sup>1</sup>.

*Err on the side of collecting more information:* 1) If your survey area seems large, collect multiple specimens from different parts of the area, particularly if the survey area covers some variation in habitat. 2) If you find a species that is not a Sensitive Species, but you would still like an ID confirmation for your own curiosity or records, send it in also. 3) If you are not sure whether two specimens are the same species, send them both in – many look-alike species can live in the same area. Some aquatic snail species may require collection of many individuals from a population in order to accurately determine the species ID. Please refer to the Survey Protocol for Aquatic Mollusk Species (Appendix F) <sup>1</sup>.

*If you are concerned about depleting the populations of very rare species:* Empty adult shells in good condition can nearly always be identified to species and are often more useful than live juveniles – collecting an empty shell will not harm the population. If you only find one or two live animals and think the local population is truly tiny, photographs are another option. Take several photographs (digital if possible) up close and from different angles, and leave the animals where they are.

### **Preservation**

To keep terrestrial slugs and snails alive, keep them moist (use soaked, unbleached paper towels or wet leaves from their habitat to provide humidity) and as cool as possible (refrigerator if available). Cleaned film canisters work well for transporting specimens. Moisture is more important than fresh air – don't poke holes in the container! If you do, the animals are likely to dry out.

Sending live slug and snail specimens for ID is fine, but they should be sent only by prior arrangement -- please call (541) 464-3338 before sending them.

Otherwise, live slug and snail specimens should be preserved before sending. Place terrestrial animals in closed containers filled with water (no air) for 12-36 hours. To avoid rupture of tissues, transfer the drowned specimens to 30-50% ethanol or isopropyl alcohol for a few hours, and then to well-labeled, leak-proof containers with 70% (or higher) alcohol. Aquatic specimens require additional steps for adequate preparation of vouchers. Please see Appendix F in the Aquatic Mollusk Survey protocol for details on the methods for relaxing these specimens.

Empty shells do not need to be preserved. Pack them in well-labeled containers with cotton or paper towels to prevent damage to the shells. Use separate containers for each taxon if possible.

### **Labeling**

Make sure all specimens are clearly, individually labeled with at least the following information:

Date of collection

Collector's name

Location (Township, Range, Section; GPS, UTM's; or verbal description)

ISMS Loc ID (if available)

Any other specimen number used

If applicable:

Plot number

Project name

Preliminary species ID

Include with each shipment the administrative unit, the name and phone and/or email address of the contact person, and a copy of the survey field form if applicable. Other relevant information from the survey, such as habitat features or plant community associations, is encouraged and may help identification.

### **Shipping**

Make sure specimens are well-padded, especially if they are in alcohol or in glass containers. Mark the outside with "Fragile", etc. as appropriate. There may be restrictions on sending containers with alcohol, since it is flammable, depending on the method of shipment. Be aware of labeling or packaging requirements. All specimens will be verified by specialists within a few weeks and identification information returned to the sender. Vouchers will be curated and kept in the regional collection for final deposition, unless the provider indicates a need for the return of a specimen.

Send all specimens for ID to:

**Nancy Duncan**  
**Roseburg District BLM**  
**777 Garden Valley Blvd.**  
**Roseburg, OR 97470**

Call (541) 464-3338 before shipping to make sure they can be received. Priority mail, FedEx, or similar methods are recommended.

<sup>1</sup> Terrestrial and Aquatic Mollusk Survey Protocols can be found at [www.or.blm.gov/surveyandmanage/](http://www.or.blm.gov/surveyandmanage/). Click on the "Survey Protocol" tab and then scroll down to "Mollusk". Select "IM OR-98-097, 08/31/98". Links to documents are at the end of the memo. These protocols were developed for the Survey and Manage Program. They are not required under the R6 Sensitive Species Program, but are tools for you to use in management of sensitive species.